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Abstract

A scanning system and method for scanning for an object within a region, or for locating a point within a region. Embodiments of the invention include a method for scanning for an object within a region using a Low Discrepancy Curve (LDC) scanning scheme. The method may: 1) generate a Low Discrepancy Sequence (LDS) of points in the region; 2) calculate an LDC in the region based on the LDS of points; and 3) scan the region along the LDC to determine one or more characteristics of the object in response to the scan. In calculating the LDC in the region based on the LDS of points, the method may connect sequential pairs of the LDS with contiguous orthogonal line segments (each parallel to a respective axis of the region), then sample the segments, generating points which may be used to generate the LDC, such as by a curve fit.